

Bovine TB News



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Michigan Update:

*Wildlife Risk*A*Syst meetings being held*

MSU Extension began conducting meetings to educate producers about the changes in the MOU and the need to have a Wildlife Risk*A*Syst (WRA) assessment and mitigation plan developed and implemented. Meetings were held in Ellsworth in the afternoon and evening of March 3. The combined attendance for those two meetings was 66. Minimum standards for risk factors are being discussed. Producers should use this opportunity to identify and reduce the risks to their herds.

Producers who sell breeding stock need to be wildlife risk mitigation verified or the buyers of their stock will be targeted for whole-herd testing beginning in 2010. In order to be verified on time, they need to contact MDA before June 30, 2009. The first step in becoming risk verified is to attend an educational meeting. Producers need to attend one of these meetings to get started in the process. These meetings are the only scheduled to date that count for that.

Meeting schedule:

- March 12, 6:00 – 8:30 pm, Petosky Fairgrounds, 1129 Charlevoix Ave, Petoskey
- March 17, 6:00 – 8:30 pm, Forest Twp. Hall, 9511 M-68, Tower
- March 18, 1:00 – 3:30 pm, Elmer Twp. Hall, 863 W. Kittle Rd., Mio
- March 23, 6:00 – 8:30 pm, Lincoln United Methodist Church, 101 E. Main St., Lincoln
- March 24, 6:00 – 8:30 pm, Hillman Free Methodist Church, 331 W. Third St., Hillman

MDA sought and used input for MOU and minimum risk standards

Through five meetings and several committees, MDA has sought input from producers and other stakeholders in the fine-tuning of the proposed Memorandum of Understanding between state and federal agencies for the eradication of bTB. Changes were made based on that input. The proposed requirements for herds in the western six counties of the current MAZ which would become an area called Compartment 1 of the MAAZ, and the benefits of becoming verified as wildlife risk mitigated are shown in the table below:

MAAZ Compartment 1 – Proposed Requirements

(Antrim, Charlevoix, Cheboygan, Crawford, Emmet, Otsego Counties)

With Wildlife Risk Mitigation Plan (WRM) <i>verified</i>	<i>Without</i> a Wildlife Risk Mitigation Plan (WRM)
Breeding Herds <ul style="list-style-type: none"> Surveillance testing and herd inventory reconciliation: <ul style="list-style-type: none"> Whole herd test and herd reconciliation every 12 months Movement (within the MAAZ) testing: <ul style="list-style-type: none"> No additional testing* Movement (into another zone) testing: <ul style="list-style-type: none"> Animals less than 6 mo. old: <ul style="list-style-type: none"> No additional testing* Animals 6 mos. old and older: <ul style="list-style-type: none"> 60 day test required 	Breeding Herds <ul style="list-style-type: none"> Surveillance testing and herd inventory reconciliation: <ul style="list-style-type: none"> Whole herd test and herd reconciliation every 12 months Movement (within the MAAZ) testing: <ul style="list-style-type: none"> 60 day test required Movement (into another zone) testing: <ul style="list-style-type: none"> Animals less than 6 mo. old: <ul style="list-style-type: none"> 60 day test required Animals 6 mos. old and older: <ul style="list-style-type: none"> 60 day test required
Feeder Cattle Producers <ul style="list-style-type: none"> Surveillance testing and herd inventory reconciliation: <ul style="list-style-type: none"> Whole herd test and herd reconciliation every 24 months Movement (within the MAAZ) testing: <ul style="list-style-type: none"> No additional testing* Movement (into another zone) testing: <ul style="list-style-type: none"> Animals less than 6 mo. old: <ul style="list-style-type: none"> No additional testing* Animals (sexually intact) 6 mos. old and older: <ul style="list-style-type: none"> 60 day test required (unless moving to a terminal feedlot) 	Feeder Cattle Producers <ul style="list-style-type: none"> Surveillance testing and herd inventory reconciliation: <ul style="list-style-type: none"> Whole herd test and herd reconciliation every 24 months Movement (within the MAAZ) testing: <ul style="list-style-type: none"> 60 day test required Movement (into another zone) testing: <ul style="list-style-type: none"> 60 day test required
Feedlots/Slaughter only <ul style="list-style-type: none"> Surveillance testing and herd inventory reconciliation: <ul style="list-style-type: none"> Whole herd test and herd reconciliation every 36 months Movement testing: <ul style="list-style-type: none"> Not required – animals restricted to slaughter only 	Feedlots/Slaughter only <ul style="list-style-type: none"> Surveillance testing and herd inventory reconciliation: <ul style="list-style-type: none"> Whole herd test and herd reconciliation every 36 months Movement testing: <ul style="list-style-type: none"> Not required – animals restricted to slaughter only

* Assumes producer is current on whole herd testing

bTB prevalence in deer from DMU 452

The 2008 prevalence of bTB in deer harvested in Deer Management Unit 452 in parts of Oscoda, Montmorency, Alpena and Alcona Counties is 1.8 percent. The bTB prevalence in deer for that area for the past six years is listed below. From 1998 – 2002 the rate was steady at around 2.5%.

2008	1.8 %
2007	1.4
2006	2.3
2005	1.2
2004	1.7
2003	1.7

DNR Wildlife Veterinarian Steve Schmitt was quoted in the DNR press release as saying "We may have lowered it as far as we can with our current strategy."

National Update:

North Dakota herd cleared after whole-herd test

On March 6, North Dakotan state veterinarian Susan Keller announced that all of the 28 suspect cows from first round testing of a herd of over 200 cows had cleared without any evidence of bTB. The results from another suspect cow from the second round of testing will be available in several weeks. This herd was tested as a traceback of a cow with bTB lesions identified at slaughter. In addition, four neighboring herds will be tested.

North Dakota proceeding with animal ID

The state has been continuing work to establish premise ID for its cattle herds. Currently, approximately 96% of the dairy operations and 70% of the beef operations have received a premise ID. This will enable it to respond to animal health issues faster and more universally.

Ohio shows no deer positive for bTB

Ohio Department of Natural Resources checked 1021 hunter-killed deer from late 2008 for Chronic Wasting Disease (CWD). Most of these deer were also checked for bTB. No cases of either disease were found.

Sharpshooters reducing deer herd in Minnesota

Over 6200 head of cattle from the area were slaughtered as a result of the buyout of 46 herds. Now, USDA Wildlife Services sharpshooters have begun killing deer in the Minnesota bTB zone. They will be on the ground through early April with two weeks of aerial shooting in mid-March. Their aim is to thin the herd that has a current density less than 5 deer per square mile.

Research Update:

Efficacy and immunogenicity of *Mycobacterium bovis* DeltaRD1 against aerosol *M. bovis* infection in neonatal calves.

Waters WR, Palmer MV, Nonnecke BJ, et al. Vaccine. 2009 Feb 18;27(8):1201-9.

A modified-live *Mycobacterium bovis* deletion mutant (DeltaRD1) was constructed and characterized. This *M. bovis* DeltaRD1 vaccine strain administered to calves at 2 weeks of age provided similar efficacy as *M. bovis* bacillus Calmette Guerin (BCG) against low dose, aerosol challenge with virulent *M. bovis* at 3.5 months of age. With further refinement, the DeltaRD1 strain may prove useful for bovine TB vaccine programs. *New vaccine technologies continue to allow for the development of new vaccines against bTB which may be useful in bTB control programs.*

Bovine tuberculosis in cattle and badgers in localized culling areas.

Woodroffe R, Donnelly CA, Cox DR, et al. J Wildlife Dis. 2009 Jan;45(1):128-43.

In Britain, failure to control bovine TB has been linked to persistent infection of European badger populations. However, culling of badgers in the vicinity of recent TB outbreaks in cattle has failed to reduce the overall incidence of cattle TB. Interestingly, localized culling appeared to prompt an increase in the prevalence of *M. bovis* infection in badgers. Potential reasons for this include disrupting ranging and territorial behavior and hence increasing intraspecific transmission rates. This elevated prevalence among badgers could offset the benefits, for cattle, of reduced badger densities and may help to explain the failure of localized culling to reduce cattle TB incidence. *This study highlights the need for comprehensive and integrated bTB control programs. Focusing on just one variable (i.e. wildlife control) may likely lead to program failure.*

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This newsletter is meant to keep you updated about bTB in Michigan and elsewhere and to answer questions you may have. If you have a question, please send it by return e-mail. Address questions or comments to Phil Durst at 989-826-1160 or durstp@msu.edu.

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